

This application is related to the following concurrently filed U.S. Patent Applications:

- i) Application No.: 09/439,661 entitled "IMPROVED PLASMA PROCESSING SYSTEMS AND METHODS THEREFOR,"
- ii) Application No.: 09/439,675 entitled "TEMPERATURE CONTROL SYSTEM FOR PLASMA PROCESSING APPARATUS,"
- iii) Application No.: 09/440,418 entitled "METHOD AND APPARATUS FOR PRODUCING UNIFORM PROCESS RATES,"
- iv) Application No.: 09/440,794 entitled "MATERIALS AND GAS CHEMISTRIES FOR PLASMA PROCESSING SYSTEMS" and
- v) Application No.: 09/439,759 entitled "METHOD AND APPARATUS FOR CONTROLLING THE VOLUME OF PLASMA."

Each of the above-identified patent applications is incorporated herein by reference.

## IN THE CLAIMS:

APR 1 5 2002

Please **AMEND** claims 1, 19 and 37 as follows:

[All pending claims are hereby reproduced for the convenience of the Examiner]

1. (Thrice Amended) A plasma processing system, said plasma processing system comprising:

a substantially cylindrical plasma processing chamber used to process a substrate, said substantially cylindrical plasma processing chamber including a top region and a peripheral region;

a gas flow system coupled to said plasma processing chamber, said gas flow system controlling flow of input gas into at least two different regions of said plasma processing chamber; said input gas being a source gas suitable for use to etch said substrate in said plasma processing chamber;

wherein said at least two different regions include at least one peripheral region and at least one top region of said plasma processing chamber; and

